

Engaging Students: Indonesian Traditional Culinary Digital Comic as a Media for Teaching Procedure Texts

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Abstract. Digital comics can be considered as learning media that can attract students' attention and communicate educational information effectively in. However, little research discusses digital comics about Indonesian traditional culinary. Therefore, this research aims to create an Indonesian traditional culinary digital comic using Pixton to teach procedure texts. This research adopted the Research and Development (R&D) approach with the development model of Plomp, which comprises three phases: preliminary research, prototyping, and assessment. Validation of the developed media was done with the help of media experts, a content expert, and an English teacher. The practicability of the media was tested by collecting the responses from the students. The results revealed that the developed media received a score of 86% of validity, meaning that the media is highly valid, and the responses of the students were 84%, meaning that the media is highly practical for classroom practice. Therefore, the developed digital comic is recommended as an alternative learning medium for teaching procedure texts.

Keywords: Indonesian traditional culinary, learning media, Pixton, procedure text

1. INTRODUCTION

According to Sanjaya (2012), learning media encompasses tools, environments, or activities designed to enhance knowledge, shape attitudes, and develop skills among users. Similarly, Musfiquon (2012) defines learning media as tools that assist teachers in delivering information to students more effectively and efficiently, whether in physical or virtual formats. The use of learning media is expected to facilitate quicker comprehension of learning materials and make learning more appealing to students, ultimately encouraging them to acquire and retain knowledge.

The problem faced by teachers is the lack of entertaining methods and media that make it challenging to arouse the interest of learners in the learning process. Technology can be used as a learning tool to resolve this issue. The use of digital comics as a means to engage learners and transfer information is widespread in practice. Pixton is a platform where students can design digital comics. According to Lee (2013), Pixton is a free web-based program that is available for anyone. The platform was created to allow its users to generate entertaining digital comics, as Mustakim (2020) states. It provides its users with the opportunity to make their own web comics. In the current research, researchers chose Pixton to create comics and use them as learning material. The use of Pixton provides students with an advanced visual tool for interactively exploring the world of comics. The use of Pixton helps students become more creative while writing dialogues in dialogue or chat boxes, as well as choosing the characters of Pixton as the themes of the comic.

A procedure text is a series of instructions designed to accomplish a specific task. Essentially, procedural text explains how to complete a task through a series of steps or operations. Similarly, Wardiman et. al (2008) describe procedural text as a type of text that provides instructions or guidance for task execution through a series of structured steps. These detailed step-by-step instructions ensure that activities can be carried out systematically and completely. However, many students encounter difficulties in understanding and writing procedural text. Problems that learners usually encounter are arranging ideas in an organized way, choosing correct imperative verbs, using ordinal numbers appropriately, and choosing vocabulary on certain themes. These problems may undermine students' motivation in learn and hinder them from writing coherent procedural instructions. As a result, it is suggested that teachers should employ novel means of learning to provide examples, increase students' motivation in learn, and help them better comprehend the characteristics of procedural instructions. According to Anderson and Anderson (1997), procedural instructions usually have certain linguistic characteristics. Linguistic characteristics include sentences that start with imperative verbs, the use of ordinal numbers and conjunctions that relate to time, adverbs that indicate the manner in which actions are done (e.g., quickly, surely), and precise or technical vocabulary (e.g., milliliters, grams).

As explained by Fardiaz (1998), traditional culinary refers to food and drinks traditionally prepared in a specific region, including snacks and mixed dishes. Such food uses recipes inherited in the local community for generations, together with the utilization of ingredients suited to local tastes. Apart from being a way of highlighting Indonesia's cultural heritage of Indonesia, traditional cooking can also serve as authentic materials for teaching English in the classroom, especially procedural texts. As such, because procedural sentences deal with explaining the process of performing a task, traditional recipes are used for practicing the sequence of sentences and the use of imperative verbs and time conjunctions as well as relevant vocabulary. Hence, not only does the integration of Indonesian traditional culinary into English language learning contribute to the improvement of the English language but also helps in acquiring knowledge of culture and local traditions.

Furthermore, a few studies focus on the development of English Worksheets on procedure text (Munawwaroh et al., 2026) and the development of comic strips as learning media to teach English writing skills (Zahrok et al., 2026). However, this study will discuss an Indonesian traditional culinary digital comic as a medium for teaching procedure text.

From the above discussion, it can be seen that the purpose of this study is to develop an online comic about the topic of Indonesian traditional culinary using the online website Pixton as well as use it as the learning medium for the subject of procedural text. Specifically, the study will investigate the validity and practicality of the medium, as well as its potential for helping students comprehend procedural texts.

2. METHOD

This study uses Research and Development (R&D) method outlined by Plomp (2007). The approach focuses on exploring instructional models or designs, as well as creating instructional products, which in this case will be teaching materials and learning media. The product of this research is in the form of a learning media product. In this study, Plomp's development model consists of the following three phases: (1) Preliminary Research, (2) Prototyping Phase, and (3) Assessment Phase. As represented in Figure 1.

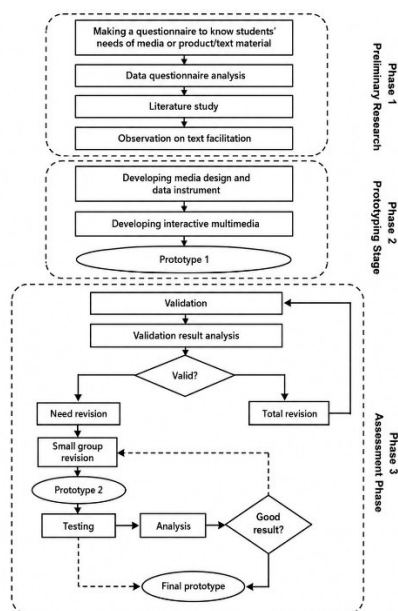


Figure 1 Plomp's Developing Phase Model.

In the Preliminary Research phase, data were collected before the development of learning media. It included collecting data about students' needs, conducting a literature review, and assessing the instructional facilities of the research site. The purpose of this phase was to create a basic foundation for the development process. After the completion of the development of the digital comic with the help of Pixton software, the material and media were validated by the validators, followed by a user test. Testing followed certain criteria, while feedback from the validators was used to improve the learning media.

According to Utami et al. (2018), the learning media should be subjected to tests and validation conducted by media experts, material experts, English teachers, and students themselves. Research data in this study were classified into three categories. First, data related to the development process of the learning media were gathered directly from the researcher. Second, the validity of the media was measured through expert opinions of the media, material experts, and the English teacher. Third, the practicality of the media was determined through expert opinions of the media, material experts, the English teacher, and students.

Methods of collecting data were used to gather data that were needed to develop the digital comic on Indonesian traditional culinary learning media. The methods of collecting data include field notes, validation, and surveys. Instruments used in the study include field note sheets, validation sheets based on a 5-point Likert scale, and questionnaire sheets.

After gathering all required data from various sources, the next step was data analysis. The data analysis process is important in answering the research questions raised in the study. Several data analysis techniques have been used, such as analysis of development process results, analysis of validity of learning media, and analysis of practicality of learning media.

3. RESULT

The validity and practicality were used as criteria for determining the feasibility of the learning media. Data for the validity of the media were obtained from the validation sheets which have been completed by media experts, content experts, and English teachers in the process of the assessment phase. The final percentage score was calculated for each validator, and then the overall mean percentage score among all validators was obtained. Media validation data analysis is shown in *Table 1* below:

Table 1 Data Analysis of Media Validation Results

No.	Validator	Total Validation Value (ΣNV)	Final Value Percentage (%NA)	Validation Criteria
1.	Media Expert	85	88	Highly Valid
2.	Content Expert	85	78	Valid
3.	English Teacher (Practitioner)	170	90	Highly Valid
Total Average Validation Value (%AV)		340	86	Highly Valid

From *Table 1*, it can be seen that the media expert gave the validity score of 88%, which was considered "highly valid". The content expert scored 78%, which can be categorized as "valid," whereas the English teacher (practitioner) gave a 90% score and was classified as "highly valid". From the results obtained above, it can be said that the overall average validity percentage of the media is 86%. Since the percentage obtained is above 85%, it can be concluded that the development of an Indonesian traditional culinary digital comic for procedure text is considered "highly valid" by media experts, content experts, and teachers.

The theoretical practicality of the media was analyzed in the theoretical aspect by completing the validation sheets. Validation sheets were made in order to test the validity and the theoretical practicality of the media. The aim of conducting such

analysis is to know whether the media is feasible to be implemented in the field based on the judgment of the experts. The results of the theoretical practicality analysis are shown in *Table 2* below:

Table 2 Analysis of Media Practicality Data (Theoretical Aspects)

No.	Validator	Practicality Value (VP)	Qualitative Category	Descriptions
1.	Media Expert	88	A	It can be used without revision
2.	Content Expert	78	B	It can be used with a few revisions
3.	English Teacher (Practitioner)	90	A	It can be used without revision
Average of Practical Value (APT)		86	A	It can be used without revision

From *Table 2*, it can be seen that the analysis results on the practicality of learning media featuring Indonesian traditional culinary, which was done by experts. The media expert gave the practicality score of 88, which was categorized as A, meaning that the media was considered suitable to be used without any modification. The content expert scored 78, which was categorized as B, meaning that some revisions were needed. The English teacher (practitioner) scored 90 and was categorized as A too.

From the data analysis, the average total practicality (ATP) of the media is 86%, thus categorizing the media in Category A, and showing that the media does not need any revision. Based on the theory of media practicality, the media is considered practical in theory when experts see the media as usable either without any revisions or with minor revisions. Applying the theoretical model to the analysis of the data results in the finding that the media is practically feasible in theory. The percentage of students' responses after using the learning media is established from the analysis of students' feedback. *Table 3* shows the analysis of the student responses on the usage of the learning media in procedure-text learning:

Table 3 Results of Student Response Data Analysis

No.	Aspect	Total Value (Σ SR)	Student Responses Percentage (%SR)
1.	Cognitive	1222	85%
2.	Affective	539	84%
3.	Conative	260	81%
Total Average Value		2021	84%

As shown in *Table 3*, the average score of students' responses concerning the Indonesian traditional culinary digital comic as a learning medium for procedure text is 84%. This is supported by the practicality criteria that have been met. Therefore, it can be said that students' reaction to the media is positive and pragmatic.

The primary goal of developing this media is to improve the teaching and learning process as well as knowledge transfer. For the media to be of high quality and

feasible, it needs to be in accordance with the development process and procedure. This point of view is supported by the findings of Kristin & Jacqueline, as cited in Nuryadi & Bahtiar (2017), that learning media is feasible when they meet three criteria: validity, practicality, and effectiveness. However, in this study, the feasibility evaluation focuses on the quality of the media, assessing only two criteria: validity and practicality.

The technical quality of the media includes factors such as design, usability, and visual quality. The learning design criterion examines the extent of conformity between the content and learning objectives and its comprehensiveness. The instructional dimension focuses on the involvement of users in activities to facilitate the learning process and achieve the desired outcomes. This view is also confirmed by Walker and Hess, as cited in Arsyad (2015), according to whom the technical quality includes readability, user-friendliness, display quality, and application management. Furthermore, the learning design dimension relates to the quality of the content and its conformity with objectives; and the instructional dimension improves motivation and facilitates the effective and productive learning process. As shown by media validation results from expert assessment, the development of Indonesian traditional culinary digital comics for teaching procedure text is regarded as very valid by media experts, content experts, and teacher experts. This is supported by the opinion of Puri Rahayu (2019), according to whom media development is regarded as valid if it is validated by experts and has a strong theoretical basis.

The aspects of evaluating learning media need to be defined to assess the practicality. According to Nienke, as cited by Fukoha (2015), practicality is determined by two important aspects: (a) practitioner or expert approval that the developed learning media will be useful for users, and (b) the media can be implemented easily in practice. Yudha (2012) defines practicality through two criteria: theoretical practicality and empirical practicality. In this study, the theoretical practicality is evaluated by the expert validators using validation sheets. To evaluate this aspect, four rating categories have been defined: A for the media that is usable without revision, B for media that requires some revision, C for media that requires many revisions, and D for media that is unusable. Based on the expert assessment, the Indonesian traditional culinary learning media for teaching procedure text is rated A, thus, it is regarded as suitable for use without revision. This finding is confirmed by the opinion of Fuadi (2020), according to whom the learning media is theoretically practical if the validators agree on its implementation without any modification.

Amir (2015) defines the responses into three categories: cognitive, affective, and conative. The cognitive responses relate to knowledge, skills, and information about the subject. In this study, the responses show that the Indonesian traditional culinary digital comic learning media helps in rapid comprehension of the material. The information presented in it is structured in a way that all necessary learning points are provided briefly. As stated by Daryanto (2013), well-structured learning materials, together with properly chosen images, make information easier to understand. Also, it is worth saying that the language of the learning media greatly helps students to comprehend the material. This is in accordance with the findings of the study by Suwartono & Hidayat (2016), according to whom communicative language allows students to comprehend learning materials faster. Moreover, based on the analysis of the students' responses, it is clear that the learning media is user-friendly as it is easy to navigate. Also, it is noted in the feedback that there is no confusion during the

learning process because the digital comic media are easy to navigate and contain easy-to-reach links that help students understand the learning process. In addition, the usage of comic images in the learning media helps students to understand the material better due to the fact that engagement with the material becomes easier. The inclusion of Indonesian traditional culinary elements in the comic form makes information acquisition easier and reduces boredom in the lesson. It is supported by the findings of Khalim (2013) that state that the use of subject-relevant images improves the comprehension of the information and results in better performance of the students. Also, proper choice of fonts, sizes, and colors in learning media greatly improves students' comprehension, as confirmed by students' responses in accordance with Holiwarni's research, which states that poor color contrast hinders differentiation of content and that the typeface and font size should be coherent with the media design.

Sitepu (2015) says that the affective dimension includes emotional responses related to feelings, values, appreciation, enthusiasm, motivation, and attitude towards the developed media. These responses appear when the preferences of the audience change. In this study, students' feedback shows an increase in motivation to engage in the learning process. The students not only read the text but also engage in the images and audio content, thus making the learning experience better. Also, the findings suggest that the media is appealing to the students and they do not experience any boredom during the lessons due to the presence of text, images, and audio in it. Moreover, it is revealed that the digital comic learning media stimulates the curiosity of the students, and they are eager to explore the material, having positive experiences. This curiosity stimulates students to ask questions and gain information that will be useful for them and others.

Amir (2015) also states that conative responses relate to behavioral tendencies, desires, and actions in relation to attitude objects. Based on the analysis of the students' feedback, it can be said that the learning media helps to increase the engagement of the students in the learning process. The students say that the media motivates them to ask questions and to participate actively during lessons. This happens because the media allows independent study, encouraging students who find the material difficult to ask questions. This is supported by the opinion of Prilanita & Sukirno (2017), according to whom increased access to information leads to increased questioning by students. Also, the learning media motivates students to participate actively, since they take part in answering questions either in replying to teachers and peers to check their comprehension or by using the media's Quiz function. The same point of view is shared by Puspitasari & Widiyanto (2016), according to whom the learning media increases the activity of the students since it leads to an increasing number of students asking questions and giving opinions. Based on this indicator, based on the analysis of the students' responses, it can be said that the students want to integrate learning media in the ELT.

The results of the students' responses analysis reveal the positive attitude of students towards the use of learning media related to Indonesian traditional culinary in ELT classes from cognitive, affective, and conative aspects. As a result, the development of Indonesian traditional culinary digital comics for procedure text instruction is feasible, as students have reacted positively to the implementation. Such an approach corresponds to the view by Arsyad (2015) that media is feasible only if students have positively responded to its implementation. Thus, taking into account the results of the research concerning the feasibility of the digital comic development

for procedure text instruction, it can be concluded that the Indonesian traditional culinary digital comic is perfect for instructional purposes. Its validity and practicality, proven throughout the development process, confirm its feasibility for procedure text instruction. The final product has some important features, such as the storyline, illustrations, procedural text materials, Indonesian traditional culinary materials, vocabulary, and learning activities (Hidayatullah, 2024).

Despite the aforementioned results, this study has several limitations. First, the development of the procedure text is limited to Indonesian traditional culinary. Second, the measurement of the students' responses is limited to a small number of participants. Based on these limitations, future research is suggested to involve a larger number of participants and use various topics on digital comic development.

4. CONCLUSION

Following the research and development model by Plomp (2007), the current study was conducted to create digital comics that use Indonesian traditional culinary as the theme for learning procedural texts. The model consists of three stages, namely, preliminary research, prototyping, and evaluation. At the stage of preliminary research, student needs analysis, literature review, and learning facilities in schools have been performed in order to provide a strong foundation for the research. The prototyping stage is characterized by product design and development that includes two activities: flowchart creation and storyboard production. Finally, after the design is done, the final product becomes a finished learning medium. The evaluation stage implies validation by media experts, content experts, and English education practitioners, as well as modification and small-scale testing of the product. Thus, the study successfully created the digital comic featuring Indonesian traditional culinary as the learning medium for procedural texts in English education. Consequently, the medium has shown a high validity level, with a validity score of 86% based on feedback from expert validators, and a usability score of 84% due to positive feedback from students.

As a result of this study, it may be claimed that the developed digital comics are suitable for classroom instruction and have the potential to become an educational tool for procedural text education by providing culturally appropriate and interesting media. Moreover, this study is one of the contributions to English language education media because of incorporating the theme of Indonesian traditional culinary into the digital comics. Unlike existing research, which has considered only general digital learning media, the current study provides alternative learning materials that can help in language learning and cultivating cultural awareness.

Based on the findings of the present study, the research team would like to give the following recommendations to teachers, students, and future researchers on how to develop this area: teachers should make the most of available learning materials to increase English activities in the classroom and use creative and innovative media. Students should use interactive and independent learning media. Even if students use media independently, they should stick to the teacher's instructions at each step of learning. For future research, it could be beneficial to work on the improvement of teaching materials, explore various learning media, and integrate aspects of cultural diversity and traditional Indonesian culinary. Besides, the research team could explore

ways of integrating advanced technologies in the process of education to increase students' learning motivations.

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